II. Remarks

Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein respectfully requested.

After entering this Amendment, claims 1-5, 7-21 remain pending.

Rejections Under 35 U.S.C. § 103

Claims 1, 2, 5-9, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,977,653 issued to Schmid, et al. (Schmid) in view of GB Patent No. 2,370,671 issued to Bauch, et al. (Bauch), U.S. Patent No. 6,198,997 issued to Ishikawa et al. (Ishikawa) and U.S. Patent No. 5,950,973 issued to Verma (Verma).

Claim 1 recites that the safety arrangement includes a sensor unit comprising at least one sensor responsive to acceleration, the sensor unit being located substantially along a central longitudinal line of the vehicle; and a control unit located remotely from the sensor unit and from the actuator and away from the central longitudinal line, the control unit being operable to receive information from the sensor unit and to transmit an actuation command to the actuator to activate the safety device; wherein the control unit comprises no sensor responsive to acceleration wherein the signal processor operates to perform a crash algorithm, which causes the signal processor to instruct the control unit to transmit the actuation command to the actuator.

Firstly, US5977653 (Schmid) has the sensor unit and control unit are in the opposite configuration as claimed. The examiner refers to 10 as the control unit and 20 as the sensor unit. From Figures 3 and 5, which is the embodiment relied on by the

examiner in the office action, the control unit 10 is located on the central tunnel of the vehicle, while the sensor unit 20 is located near an exterior side surface of the vehicle. Schmid explains why this is the case. The control unit 10 is located in the center of the vehicle to be spatially separated from the impact detection configuration (see the paragraph bridging columns 3 and 4) whereas the sensor unit 20 is located near an exterior side surface of the vehicle in order to detect side impacts rapidly.

By very clear contrast, the sensor unit of the claimed invention is located near the central tunnel of the vehicle so that the acceleration experience by the unit is representative of the acceleration experienced by the vehicle as a whole, and the control unit is located away from the central tunnel, and the sensor unit, because space on the central tunnel is at a premium, and also because the relatively heavy control unit may generate vibrations which would affect the accuracy of the readings gathered by the sensor unit. The system of Schmid therefore has both of the main components of the present invention in entirely the wrong places, for reasons which are in conflict with those presented in the specification. It therefore appears that Schmid actually *teaches away* from the claimed invention.

Nevertheless, turning to GB2370671 (Bauch), there is no teaching or motivation to suggest that a skilled person modify the system shown in Schmid. Bauch does disclose a sensor (26) which is mounted on the central tunnel of the vehicle. The examiner has stated that this is for measuring lateral acceleration, although Bauch makes no mention of why placing the sensor here is particularly good for measuring lateral acceleration. In addition, the system of Bauch includes several other sensors

(18,20,22,24) which are also stated to be (on page 6 of Bauch) for measuring lateral acceleration.

Referring to figure 5 of Schmid, it can be seen that the layout of the sensors (20) is fairly similar to that shown in figure 1 of Bauch. Since the additional sensor 26 shown in Bauch only appears to measure the same quantity that is already measured by the peripheral sensors (which are present in Schmid already), it is not clear what motivation could be pointed to for introducing the additional central sensor into the system of Schmid. While the examiner states in the office action that the accelerator in the tunnel portion of the vehicle allows the vehicle to effectively measure the lateral acceleration of the vehicle, Bauch provides no teaching regarding this point. As such, examiner does not relate why a single sensor placed near the tunnel would teach switching the sensor unit 20 and control unit 10 contrary to Schmid own teachings. Further, modifying Schmid in this manner would frustrate the stated objective of Schmid to locate the sensor unit 20 an exterior side surface of the vehicle in order to detect side impacts rapidly.

The Examiner may not reject as obvious a claim directed to a combination of several limitations merely by demonstrating that each element is independently known in the art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007). To support an obviousness rejection, the Examiner should identify a reason that would have prompted one of ordinary skill in the relevant field to improve the known device in the same manner as the claimed invention. 127 S. Ct. at 1740-41; 72 Fed. Reg. at 57,531. The Examiner must avoid distortion caused by hindsight bias when arguing such a combination is obvious. 127 S. Ct. at 1742.

Finally, the examiner points to US5950973 (Verma) to show that the control unit may be located away from the central tunnel. This again appears to be a clear instance of hindsight reconstruction, in order to assemble a combination which has all of the elements of claim 1. As no factual evidence is provided that one of ordinary skill in the art would have been motivated to combine the references in the manner claimed. Overall, the claimed invention provides a specific combination of features which brings about a particularly advantageous result. This advantageous result is not hinted at anywhere in the prior art, and it is unrealistic for the examiner simply to select features from a range of documents and state that it would be obvious for one of ordinary skill in the art to make this combination, which would appear to be arbitrary from the standpoint of a skilled person at the priority date who was not already aware of the invention.

Claims 2, 5-9, and 15 depend from claim 1 and are, therefore, patentable for at least the same reasons as given above in claim 1.

Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch, Ishikawa and Verma as applied to claim 1 above, and further in view of GB Patent No. 2,292,126 issued to Burton, et al. (Burton). Claims 3 and 4 depend from claim 1 and are, therefore, patentable for at least the same reasons as given above in claim 1.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch, Ishikawa and Verma as applied to claim 1 above, and further in view of U.S. Patent No. 6,113,138 issued to Hermann, et al. (Hermann).

Claim 10 depends from claim 1 and is, therefore, patentable for at least the same reasons as given above in claim 1.

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch, Ishikawa and Verma as applied to claim 1 above, and further in view of U.S. Patent No. 6,459,366 issued to Foo, et al. (Foo). Claim 11 depends from claim 1 and is, therefore, patentable for at least the same reasons as given above in claim 1.

Claims 12-14 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch, Ishikawa and Verma as applied to claim 1 above, and further in view of U.S. Publication No. 2002/0084636 issued to Lewallen, et al. (Lewallen). Claims 12-14 and 16 depend from claim 1 and are, therefore, patentable for at least the same reasons as given above in claim 1.

Claims 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch Ishikawa and Verma as applied to claim 1 above, and further in view of U.S. Patent No. 6,522,992 issued to McCall, et al. (McCall). Claims 17-20 depend from claim 1 and are, therefore, patentable for at least the same reasons as given above in claim 1.

Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmid in view of Bauch, Ishikawa and Verma as applied to claim 1 above, and further in view of U.S. Patent No. 6,145,389 issued to Ebeling, et al. (Ebeling). Claim 21 depends from claim 1 and is, therefore, patentable for at least the same reasons as given above in claim 1.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted by,

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